American Black Bear

Where are They in Alabama?

By *Ryan Prince*, Wildlife Forester, Alabama Forestry Commission

American black bear *(Ursus americanus)* was once abundant throughout North America. Populations were once believed to exceed over two million animals. Recent populations have since been reduced to an estimate of approximately 600,000–700,000 animals. The drop in numbers was primarily accredited to habitat loss through extensive land clearing for agricultural use. Other factors leading to the decline were human disturbance and illegal kills. However, today's bear population is showing an upward swing in numbers.

Appearance

Black bears in Alabama are typically black in color with a brown muzzle. An occasional blaze of white may be seen on the chest. Body weights range from 150-350 pounds for adult males and 120-250 pounds for adult females, with body lengths from 3-6 feet. Body size is greatly influenced by the quality and quantity of the available food source.

Life History

Bears are a very adaptable species. They are classified as carnivores but exhibit a more omnivorous food habit, allowing them to adapt to the available food source. Bears are very intelligent and elusive, which also helps them to adapt to changes over time.

Female bears usually start having offspring at 3-5 years of age, and litters are only produced every other year. Mating normally occurs during the summer months, with cubs being born in winter dens during January and February. Litter sizes can vary from one to five cubs with twinning being common. Bear cubs are born in a helpless state weighing anywhere from 8-12 ounces and only measuring about 8 inches. They are the smallest young — in comparison to their mother — of any other mammal.

The home range for black bear varies among the sexes, with males exhibiting larger home ranges than do females. Estimates of home ranges for adult males are approximately 40,000 acres, while estimates for adult females are approximately 18,000 acres. The home range is greatly influenced by food availability, sex, age, reproductive status, and population densities.

Habitat Requirements

Black bears can inhabit a wide diversity of habitat types. They are considered habitat generalists, meaning that a well-managed and productive forest can provide the necessary essentials for habitat. The ingredients for successful bear habitat consist of quality escape cover, abundant and diverse natural foods, dispersal corridors, water, and denning sites. Alabama's black bear population exists primarily in large contiguous areas of bottomland hardwood habitat.

Alabama's Black Bear

Located primarily in the Mobile River Basin, Alabama's resident black bear population is part of the Florida black bear subspecies *(Ursus americanus flori-*

danus), found only in isolated populations in Florida, South Georgia, and South Alabama. In addition to Mobile and Baldwin counties, sightings of bears have also been reported in Choctaw, Clarke, and Washington counties. Current population estimates for this subspecies in Alabama are somewhere around 50 animals.

Sightings of another subspecies, American Black Bear *(Ursus americanus americanus)*, are also on the increase in Northeast Alabama. They are thought to be transient bears from North Georgia and Tennessee. Sightings have been reported in DeKalb, Cherokee, Calhoun, and Cleburne counties.

Bear sightings or evidence of bear can be reported to the Alabama Wildlife Federation at 800-822-9453.

Conclusion

Black bear were once common across the diverse landscape of Alabama. Thanks to conservation groups such as the Alabama Black Bear Alliance, we are starting to learn more about the black bear population in our state. As bear populations increase, so will interactions between bears and humans. If you live in an area where a bear has been seen, educate yourself on how to live with this magnificent animal as a neighbor.

References

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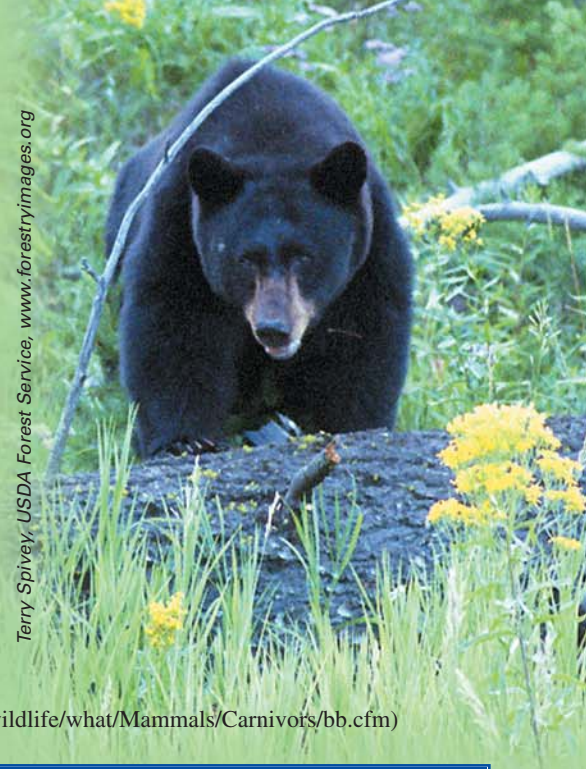

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Forest Inventory and Analysis (FIA) Program in Alabama

By *Brian Hendricks*, FIA Coordinator, Alabama Forestry Commission

Forest Inventory and Analysis (FIA) is a nationwide timber and forest resource inventory that has been ongoing for nearly 70 years in Alabama. Prior to 1997, the USDA Forest Service conducted a periodic survey approximately every ten years. However, the Forest Service and the states agreed that a ten-year interval between surveys was too long due to increases in demand of forest products and changes in land use. In 1997 the Forest Service and the Alabama Forestry Commission (AFC) agreed for the AFC to take over the data collection aspect of the survey. Beginning with the 1997 survey, the plot design changed from a 10-prism-point layout to a 4-fixed-radius plot layout. Initially, the AFC had ten crews with assigned work zones. With the help of Forest Service crews in 2000, the state survey was completed in January of 2001. Beginning in 2001 a continuous annual survey was implemented in which 20% of the total number of FIA plots were surveyed each year, so that after five years a full FIA cycle would be completed. (A cycle consists of all FIA plots distributed throughout the state;. the yearly allocation of plots to be surveyed is referred to as a panel.) In late 2005, the last panel of plots was completed for the cycle that began in 2001.

In early 2006, the FIA crew began surveying plots in the first panel of a new cycle. A decision was made to go to a seven-year cycle beginning in 2006, which meant that crews would be surveying a 15% panel each year. Today, crews are surveying plots in the second panel of the current cycle.

At present, there are eight full-time employees assigned to FIA: six crew leaders, one full-time assistant, and the FIA Coordinator. Each crew leader is accompanied by a county employee as an assistant when surveying plots.

There are 5,572 survey plots distributed throughout the state, at an approximate 3X3 mile spacing for the most part. The majority of the plots were established in the 1930s; however, for various reasons a few new plots are established each year. The plots exist on all types of ownership (private, industry, and public). The crews collect a wide variety of timber and other forest resource data from each plot. Some of the more important data collected includes forest type, stand size, type of regeneration, and treatments and/or disturbances since the last survey.

Four different subplots make up one entire plot. At each subplot, all trees 5 inches diameter at breast height (DBH) and greater are tallied within 24.0 feet of the subplot center. For each tallied tree, a DBH is collected and a height is measured, with each tree given a tree class, crown class, and crown ratio. If any rot is found in the tree, then a percentage of cubic foot cull is recorded up to a 4-inch top. For sawtimber-sized trees, additional measurements are taken including log grade and amount of board foot cull. Each subplot has a microplot associated with it. The microplot is located 12 feet and 90 degrees from subplot center. At the microplot, saplings and seedlings are tallied within 6.8 feet of microplot center.

Importance of FIA Survey

Economic Development: Most of the information pertaining to forest resources and their availability for new and expanding forest industries is obtained from the FIA survey data.

Forest Management Decision-Making: To make good forest management decisions, competent professionals must have good and timely information about the current conditions of our forests. FIA data is a primary source of those current forest conditions.

Environmental Policy: Environmental policy makers and regulators are using the FIA information as the basis upon which public environmental policy on forest use is developed and results monitored over time.